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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,839	12/18/2001	Ellen M. Heath	100.010US03	2248

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EXAMINER	
GORDON, BRIAN R	

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/024,839	HEATH ET AL.	
	Examiner	Art Unit	
	Brian R. Gordon	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12-18-01*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20* is/are allowed.

6)☒ Claim(s) *1,2,10,11,14 and 18* is/are rejected.

7)☒ Claim(s) *3-9,12,13,15-17 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12-18-01; 12-19-03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 3 recites the limitation "the locking ports" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 10-11, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Champsiex et al., US 5,578,268.

Champsiex et al. disclose a device for transferring, agitating, and sampling blood products sealed in tubes which are grouped together in cassettes wherein each cassette containing sample tubes is extracted from a storage receptacle by a moving loading and ejection carriage which shifts and positions it, using a retractable finger, in the cavity of a rotary carriage. The rotary carriage mixes the samples and stops so that sampling of tubes in the cassette can be performed by a sampling station which is

movable in relation to the tubes temporarily immobilized in a vertical position with plugs facing downwards (abstract).

The analyzer supports a rotary agitating system. As seen the rotary carriage 14 (locking arm) was mounted on a shaft 15. The latter extends beyond the carriage behind support 17 (locking arm support) as far as a drive pulley 55 (drive mechanism). The pulley is driven in rotation by a motor 57 through the intermediary of a serrated (notches) belt 58 (column 5, lines 25-35).

As seen in Figure 16 the system comprises a drive and free gear and belt coupled to both.

The analyzer comprises an input area for controlling the operation of the device.

Claim Rejections - 35 USC § 103

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Champsiex et al. as applied to claim 2 above, and further in view of Valenzky et al. US 4,707,139.

Valenzky et al. discloses a system and method for controlling a continuous mixer. Valenzky et al discloses the use of a system to monitor and control the rpm of the mixer. To monitor and control the torque, a microprocessor is connected to the motor in a known fashion. As shown in FIG. 2, the microprocessor receives three inputs which can be entered by an operator or stored in memory and fetched by the microprocessor. These three input signals are the production rate 44 in lbm/hr, the specific energy 46 in HP-hr/lbm and the mixer RPM 48. A feedback signal 58 which is proportional to the actual torque on the mixer is also required. Since torque is proportional to the DC amperage on a DC motor and to the main motor horsepower in an AC motor/clutch type arrangement, these signals are used as the feedback signals (column 4, lines 49-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the motor system of Champsiex et al. by employing a motor system of that as taught by Valenzky et al. in order to control the rpm at which the carriage is rotated.

Allowable Subject Matter

9. Claim 20 is allowed.

10. Claims 3-9, 12-13, 15-17, and 19 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: A mixing and pouring apparatus, comprising: a base; a locking arm support carried on the base; a locking arm rotatably mounted within the locking arm support; and a drive mechanism operatively coupled to the locking arm, the drive mechanism capable of rotating the locking arm drive mechanism comprises a motor having a drive shaft, the motor connectable to an external motor control; a drive gear operatively coupled to the drive shaft; a free gear operatively, fixedly coupled to the rotatable locking arm; and a belt seated over the drive gear and the free gear, and wherein the belt is movable to drive the free gear in response to motion of the drive gear; a registration mechanism, the registration mechanism comprising: a registration disk operatively, fixedly coupled to the free gear, the registration disk having a registration slot therein; an optocoupler having a transmitter and a receiver separated by a gap, wherein the registration disk is positioned to extend into the gap; and control lines operatively electrically connected to the optocoupler and to the motor; and wherein the registration slot is aligned in the gap of the optocoupler when the registration disk is in a home position wherein the locking and is in a substantially vertical position.

The prior art further fails to teach or suggest a locking arm further comprising a plurality of vessel openings and a matching plurality of vacuum ports, each of the vessel openings sized to accommodate a vessel, and each of the locking ports capable of

retaining the vessel in the locking arm; a drain trough for receiving waste material from a vessel situated in the locking arm when the locking arm is rotated to pour material from a vessel; and wherein the base includes a plurality of guide pin openings, the apparatus further comprising: a supplemental cradle having a plurality of cradle vessel openings each sized to accommodate a vessel, the supplemental cradle having a plurality of guide pins extending therefore to engage the guide pins with the guide pin openings to position the supplemental cradle on the base.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Seto, Yoshihiro; Zambaux, Jean-Pascal; Daf, David; Winkler, James L. et al.; Dale, James D. et al.; Horner; Glenn A. et al.; Maes; Gregory R. et al.; Martin; Matthew R. et al.; Berrios; Miguel; Geier; James W. et al.; Coho; Denise et al.; Covain; Serge A.; Mawhirt; James A. et al.; Thomas; David A. et al.; Neuner; Terry E. et al.; Hartnett; John J. et al.; and Gibbs Curtis W. disclose devices for rotating or rocking vessels.

Swan, Jeffrey et al.; Barkus; David Alan et al.; Zhao; Jun et al.; Meador; James W.; Ghaed; Ali et al.; and Liberati; Daniel J. disclose smart motor devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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